



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/955,351	09/17/2001	Nathan T. Lee	11576.56US01	2171
23552	7590	11/24/2004	EXAMINER	
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			THALER, MICHAEL H	
			ART UNIT	PAPER NUMBER
			3731	

DATE MAILED: 11/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/955,351	LEE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Michael Thaler	3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.138(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 February 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 3-8, 11, 17 and 18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 9, 10, 12-16, 19 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 3731

Claims 3-8, 11, 17 and 18 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made without traverse in Paper No. 8. Contrary to applicant's remarks, claims 5-8 do not read on the elected species. Claims 5-8 read on the species of figure 3 rather than the elected species of figures 8 and 9 since the tapered struts appear in figure 3 but do not appear in figures 8 and 9, noting page 4, lines 28-30 of the specification. Contrary to applicant's remarks, figures 8 and 9 do not show tapered struts.

Claims 1, 10 and 12 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Wijay (5,824,059). Wijay, in figures 1, 2 and 5, discloses a stent body having a plurality of adjacent circumferential support structures 12, 14, 16, 18 including longitudinal struts and apex portions (for example, all of the ends of the longitudinal struts, including the ends which are attached to strut 46, shown in figure 5 are considered to be apex portions), the apex portions forming junctions between

Art Unit: 3731

adjacent longitudinal struts (i.e., the vast majority of the apex portions form junctions between adjacent longitudinal struts, noting that the claim does not require all of the apex portions to form junctions between adjacent longitudinal struts), some of the apex portions of adjacent circumferential support structures being configured to overlap one another and circumferential connecting struts 40, 42, 46. For example, since circumferential connecting strut 46 extends in a plane which is perpendicular to the longitudinal axis 10, and since the apex portions at each end of strut 46 are considered to include the curved portion at the intersection of strut 46 and the longitudinal strut, the apex portions overlap one another by an amount equal to the thickness of the wire of strut 46. Alternatively, it would have been obvious that the Wijay apex portions overlap one another for the reason set forth above. As to claim 10, the longitudinal struts which are directly connected to the circumferential connecting struts 40, 42, 46 are longer than the other struts by an amount equal to the thickness of the wire of strut 46.

Art Unit: 3731

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wijay (5,824,059). Wijay, in the embodiment of figures 1, 2 and 5 fails to clearly show adjacent circumferential support structures being offset. However, Wijay, in the embodiments of figures 3 and 4, teaches that adjacent circumferential support structures should be offset such that the apex portions on one side of a support structure are positioned intermediate apex portions on a facing side of an adjacent support structure. This arrangement has the self-evident advantage of providing better support to the blood vessel around its circumference. It would have been obvious to so orient the circumferential support structures of the embodiment of figures 1, 2 and 5 so that it too would have this advantage.

Claims 19 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Pinchasik et al. (5,449,373). Pinchasik et al. disclose a stent body having a plurality of adjacent circumferential support structures (each of the undulating members which form segments 102 and which are arranged in pairs) including longitudinal struts interconnected at apex portions, and circumferential connecting struts (e.g. 112) interconnecting only some of the adjacent circumferential support structures wherein some pairs of adjacent circumferential support

Art Unit: 3731

structures have apex portions that oppose one another (where the apex at the end of one strut 112 is directly opposed to the apex at the end of another strut 112 at the opposite end of the diamond shaped cell 108) and other pairs of adjacent circumferential support structures have apex portions that are offset by the circumferential connecting struts 112 (since the apex portions at each end of each circumferential connecting strut 112 are offset or staggered from each other). That is, the apex portions at each end of each circumferential connecting strut 112 are offset or staggered from each other.

Claims 9 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wijay (5,824,059) in view of Pinchasik et al. (5,449,373). As to claim 9, Wijay fails to disclose the circumferential connecting struts joining first and second support structures extending in a first direction and the circumferential connecting struts joining second and third support structures extending in a second direction. However, Pinchasik et al. teach that the circumferential connecting struts 112 should alternate in their direction in order to minimize rotational displacement of the stent members and the delivery balloon (col. 3, lines 44-51). It would have been obvious to alternate the direction of the Wijay circumferential connecting struts so that it too would have this advantage. As

Art Unit: 3731

to claim 13, Wijay fails to disclose circumferential connecting members located between only some of the adjacent pairs of circumferential support structures. However, Pinchasik et al. teach that some of the adjacent pairs of circumferential support structures of a stent should be directly attached to each other (to form cells 108). This arrangement has the self-evident advantage of providing better support to the blood vessel in the area of cells 108. It would have been obvious to so arrange the Wijay circumferential support structures so that it too would have this advantage. As to claim 16, Wijay and Pinchasik et al. fail to disclose three consecutive circumferential support structures being interconnected by circumferential connecting members. However, it was well known in this art to arrange three consecutive circumferential support structures of a stent to be interconnected by circumferential connecting members so that, for example, the numerous connecting members provide flexibility to the stent when being inserted through tortuous blood vessels. It would have been obvious to so arrange the Wijay circumferential support structures so that it too would have this advantage. The above well known in the art statements are taken to be admitted prior art because applicant failed to traverse the examiner's assertions (M.P.E.P. 2144.03).

Art Unit: 3731

Applicant's arguments filed Feb. 26+, 2004 have been fully considered but they are not persuasive. The apex portions at the ends of links 112 are not aligned with each other since links 112 extend circumferentially. Thus, these apex portions are circumferentially staggered as claimed.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Thaler whose telephone number is (703) 308-2981. The examiner can normally be reached Monday to Friday.

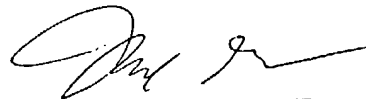


Art Unit: 3731

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael J. Milano can be reached on (703)308-2496. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0858.

mht  
4/6/04



MICHAEL THALER  
PRIMARY EXAMINER  
ART UNIT 3731